

IN THE CLAIMS

1. (currently amended) A composition comprising a combination of two or more GBS antigens, wherein said combination includes GBS 80 as represented by SEQ ID NO:3 or a fragment thereof ~~or a polypeptide sequence having 50% or greater sequence identity thereto.~~

2. (original) The composition of claim 1, wherein said combination of GBS antigens demonstrates improved immunogenicity as measured by the Active Maternal Immunization Assay, wherein said Active Maternal Immunization Assay measures serum titers of female mice during an immunization schedule and percent survival rate of pups after challenge.

3. (original) The composition of claim 2, wherein the percent survival rate of challenged pups is at least 2 percentage points higher than the percent survival rate of challenged pups from female mice immunized with a single non-GBS 80 antigen.

4. (original) The composition of claim 1, wherein said combination consists of two GBS antigens.

5. (original) The composition of claim 1, wherein said combination consists of three GBS antigens.

6. (original) The composition of claim 1, wherein said combination consists of four GBS antigens.

7. (original) The composition of claim 1, wherein said combination consists of five GBS antigens.

8. (currently amended) The composition of claim 1, wherein GBS 80 comprises the amino acid sequence of SEQ ID NO:3 ~~SEQ ID NO:2~~ or an immunogenic fragment thereof.

9. (currently amended) The composition of claim 1, wherein the fragment of GBS 80 comprises the amino acid sequence selected from the group consisting of SEQ ID NOS:~~3~~, 4, 5, 6, 7, 8, and 9.

10. (currently amended) The composition of claim 1, said combination consisting of two to thirteen GBS antigens selected from the group consisting of GBS 80 as represented by SEQ ID NO:3, GBS 91 as represented by SEQ ID NO:13, GBS 104 as represented by SEQ ID NO:20, GBS 184 as represented by SEQ ID NO:25, C5a peptidase ~~GBS 276~~, UDP-N-acetylmuramoylalanine-D-glutamate ligase (Mur D) ~~GBS 305~~, surface immunogenic protein (sip) ~~GBS 322~~, pyruvate kinase (pyk) ~~GBS 330~~, Sat D ~~GBS 338~~, cyII ~~GBS 364~~, GBS 404 as represented by SEQ ID NO:48, GBS 690 as represented by SEQ ID NO:51, and GBS 691 as represented by SEQ ID NO:54.

11. (currently amended) The composition of claim 1, said combination including GBS 80 as represented by SEQ ID NO:3, GBS 104 as represented by SEQ ID NO:20, and GBS 322 as represented by SEQ ID NO:38.

12. (currently amended) The composition of claim 1, said combination including GBS 80 as represented by SEQ ID NO:3, GBS 104 as represented by SEQ ID NO:20, C5a peptidase ~~GBS 276~~, and GBS 322 as represented by SEQ ID NO:38.

13. (currently amended) The combination of claim 1 wherein said combination comprises at least one of GBS 91 as represented by SEQ ID NO:13, GBS 104 as represented by SEQ ID NO:20, GBS 184 as represented by SEQ ID NO:25, C5a peptidase ~~GBS 276~~, UDP-N-acetylmuramoylalanine-D-glutamate ligase (Mur D) ~~GBS 305~~, surface immunogenic protein (sip) ~~GBS 322~~, pyruvate kinase (pyk) ~~GBS 330~~, Sat D ~~GBS 338~~, cyII ~~GBS 364~~, GBS 404 as

represented by SEQ ID NO:48, GBS 690 as represented by SEQ ID NO:51, and GBS 691 as represented by SEQ ID NO:54.

14. (currently amended) A fusion protein comprising a portion of a GBS 80 antigen as represented by SEQ ID NO:3 and a portion of at least one different GBS antigen.

15. (currently amended) The fusion protein of claim 14 wherein said at least one GBS antigen is selected from the group consisting of GBS 91 as represented by SEQ ID NO:13, GBS 104 as represented by SEQ ID NO:20, GBS 184 as represented by SEQ ID NO:25, C5a peptidase GBS 276, UDP-N-acetylmuramoylalanine-D-glutamate ligase (Mur D) GBS 305, surface immunogenic protein (sip) GBS 322, pyruvate kinase (pyk) GBS 330, Sat D GBS 338, cyII GBS 361, GBS 404 as represented by SEQ ID NO:48, GBS 690 as represented by SEQ ID NO:51, and GBS 691 as represented by SEQ ID NO:54.

16. (currently amended) The fusion protein of claim 15 wherein said at least one GBS antigen is GBS 322 as represented by SEQ ID NO:38.

17. (currently amended) The fusion protein of claim 16 consisting essentially of a GBS 80 antigen as represented by SEQ ID NO:3 and a GBS 322 antigen as represented by SEQ ID NO:38.

18. (withdrawn) A method for the therapeutic or prophylactic treatment of GBS infection in an animal susceptible to GBS infection comprising administering to said animal a therapeutic or prophylactic amount of the composition of claim 1.

19. (withdrawn – currently amended) A method for the manufacture of a medicament for raising an immune response against GBS comprising combining a GBS 80 antigen as represented by SEQ ID NO:3 or fragment thereof with at least one different GBS polypeptide antigen.

20. (withdrawn – currently amended) The method of claim 19 wherein said at least one GBS polypeptide antigen comprises a polypeptide or fragment thereof selected from the antigen group consisting of GBS 91 as represented by SEQ ID NO:13, GBS 104 as represented by SEQ ID NO:20, GBS 184 as represented by SEQ ID NO:25, C5a peptidase ~~GBS 276~~, UDP-N-acetylmuramoylalanine-D-glutamate ligase (Mur D) ~~GBS 305~~, surface immunogenic protein (sip) ~~GBS 322~~, pyruvate kinase (pyk) ~~GBS 330~~, Sat D ~~GBS 338~~, cyII ~~GBS 361~~, GBS 404 as represented by SEQ ID NO:48, GBS 690 as represented by SEQ ID NO:51, and GBS 691 as represented by SEQ ID NO:54.

21. (canceled)

22. (new) The composition of claim 10 wherein the C5a peptidase is GBS 276 as represented by SEQ ID NO:28.

23. (new) The composition of claim 10 wherein the Mur D is GBS 305 as represented by SEQ ID NO:33.

24. (new) The composition of claim 10 wherein the pyk GBS 330 as represented by SEQ ID NO:40.

25. (new) The composition of claim 10 wherein the Sat D is GBS 338 as represented by SEQ ID NO:43.

26. (new) The composition of claim 10 wherein the cyII is GBS 361 as represented by SEQ ID NO:46.

27. (new) The composition of claim 10 wherein the surface immunogenic protein is GBS 322 as represented by SEQ ID NO:38.

28. (new) A composition comprising:

a first polypeptide comprising the amino acid sequence SEQ ID NO:7; and

a second polypeptide comprising surface immunogenic protein (sip).

29. (new) The composition of claim 28 wherein the first polypeptide comprises the amino acid sequence SEQ ID NO:3.

30. (new) The composition of claim 28 wherein the second polypeptide comprises SEQ ID NO:38.